

In June 1999 a distinguished German weekly, *Die Zeit*, dedicated its monthly supplement to the architecture of the twenty-first century.<sup>1</sup> Quite apart from its unusual display of interest in a discipline that for many years has been relegated to the sidelines of public debate, the German publication presents a picture of the current state of architecture that is worthy of our attention. The cover is devoted to the sinuous titanium-clad outline of Frank O. Gehry's Zollhof in Düsseldorf. Inside we find articles on the virtuoso minimalism of Peter Zumthor, the ingenious ecological technology of Thomas Herzog, Peter Kulka's brilliant Scharounian eclecticism, the post-Kah-nian lesson to be learned from the formalistic monumentality of Axel Schultes and finally the experimental projects, normally labeled as "deconstructivist", of Daniel Libeskind, Zaha Hadid, Gehry again and the Coop Himmelb(l)au. Urban problems are represented through the complex scheme for the reorganization of the postindustrial territory of the Ruhr drawn up for the exhibition on the "IBA Em-scher Park," combining the themes of environmental rehabilitation with those of theme parks, large sub-urban shopping centers and the construction of a diffuse infrastructure for cultural and leisure activities. And the future seems to have been placed in the hands of a new generation in its forties, from Herzog & deMeuron to Sauerbruch & Hutton, MRVDV and Léon & Wohlhage, for whom the question of style appears to have been definitively supplanted by a design process that is wholly comprised within the individuality of the building and its particular program.

It is clear from this that, in spite of the obvious emphasis on the German situation, the picture proposed is an extremely eclectic and varied one. Above and beyond the isms pointlessly coined one after the other over the last two decades, the movements and tendencies destined to survive only in the propaganda of the popular media, what holds sway today, and not just in Germany, is an extraordinary and chaotic variety of languages and expressions. The argument that we shall try to put forward is that in reality these correspond to an essentially unitary condition of the material processes involved in the production of architecture, in the redistribution of the project (in the physical and conceptual sense) in the territory itself and in the questions and dilemmas with which architecture has been faced over this period.

If we want to introduce a bit of order here, then it is first of all necessary to turn our attention to two unresolved and crucial questions that still weigh heavily on the possibility of interpreting the entire historical cycle of Western architecture since the end of the Second World War: the running dry of the modernistic experience in the experimentation of the fifties and sixties and the return to order, within the rediscovered boundaries of a specific disciplinary

body of knowledge, expressed by the cognitive project of "urban" architecture up until the end of the eighties.

The years immediately after the end of the Second World War were characterized by questions and doubts that troubled the figurative arts and the architectural culture of Europe in equal measure: whether it was possible – and legitimate – to simply pick up from where things had been interrupted by the shift to authoritarianism and the retour à l'ordre of the thirties, and then, tragically, by the world war, the holocaust, and the bomb dropped on Hiroshima?

In other words, was it possible to retie the broken thread, salvaging the essence of the fundamental research carried out by the artistic and architectural avant-garde at the beginning of the twentieth century? Was it still legitimate to revive the hopes of cultural and social emancipation that had been raised by modern architecture: the aspiration to reshape the everyday life of the city and its inhabitants and to heal the wounds and conflicts caused by industrial society over the course of its history; the dream of a new architecture of the machine age which would go beyond borders and traditions to become a global and unitary expression of the world?

Or whether, instead, the ruins left by the war did not bring into question the whole legacy of the modern, did not oblige us to confront the possibility that the modern itself bore part of the responsibility for the disastrous course of events: that the pact signed between art and industry had contributed to raising the "storms of steel" glorified by Ernst Jünger; that it was precisely the rationality of technique and technology that had produced the implacable death machine of the war?

Whether, finally, the modern tradition, with its destructive and innovative impetus and its ambition to deny history and create new, all-encompassing systems from scratch, was still capable of interpreting human destiny and the meaning of history?

Out of this had come a rejection of just that autonomy of architectural knowledge and power that had lain at the base of the hegemonic designs of modernism and a purifying dip into the pulsating variety of the manifestations of contemporary culture. It looked as if the now age-old dichotomy between technique and culture, and architecture's long and vain dash to take possession of the world of machinery, might conclude in a pure and simple recognition of the essential identity of architecture, technology, science and society. The dream of directing the processes of reform in modern society turned into an acknowledgment of the plurality of the manifestations of mass society. The three-dimensional diagram of DNA, the metal shell of the automobile and the airplane, the new science of cybernetics, the fantastic world of cartoons and movies, the humble materials of spontaneous architecture, the

messages – however trivial – of advertising, the dreams and aspirations of ordinary people, even the unexplored depths of the human psyche: these became the materials used "as found", i. e. stemming simply from observation of the contemporary world, for the experiments carried out by young European architects in the fifties.

The reassertion of the existence of an autonomous body of knowledge proper to architecture made by Aldo Rossi in his *L'architettura della città*,<sup>2</sup> Vittorio Gregotti in *Il territorio dell'architettura*<sup>3</sup> and Robert Venturi in *Complexity and Contradiction in Architecture*,<sup>4</sup> significantly all published in 1966, raised the crucial question of a critical practice of architecture, of the reconquest of analytical tools specific to the city and the territory and to the forms of their production. The absolute present, "as found", of mass cultures was replaced by a full awareness of the historical space of Western architecture and, in particular, modernity. Architecture once again laid claim to the capacity of not just interpreting the city, but also giving it a new form, of "re-forming" it in accordance with the distinctive tradition of the modern. Studies of the morphological and typological structures of the city, originating in Italy but then spreading to the rest of Europe and to the USA, treated the urban phenomenon as the outcome of specific architectural practices, as a physical whole in which it was possible to recognize describable and reproducible practices and codes. As Michael Hays has recently observed, "the typology thesis entails a Lukacsian realist discourse that seeks an architecture whose very authenticity paradoxically depends on its reiterability."<sup>5</sup> The instruments of typology and morphology seemed to make it possible to interpret the city in its entirety, and thus render it subject to judgment and "reformable" by means of a peculiarly architectural series of operations.

From this point of view, it could be said that the theories of critical regionalism also acted within the same conceptual bounds, mediating "the impact of the global civilization with a few elements derived indirectly from the characteristics of a particular place"<sup>6</sup> and proposing the practice of an "architecture of resistance", a critical approach light years away from any kind of populist vernacular. Thus the clear delimitation of the place results in a state of friction and antagonism between universal and particular that is capable of creating meaningful urban forms.

From the picture presented above, it is clear that the reaffirmation of architecture as an instrument of cognition in its own right has been able to produce some formidable results, both on the plane of analytical interpretation and on that of the development of working instruments: the "urban project". These results are clearly visible in the "critical reconstruction of the city" tried out in Berlin and in numerous other European cities, as well as in recent American developments such as the growing popularity of so-

called "new urbanism". On the other hand, the peculiar kinds of aporia (a logical problem with no solution) that this "return to order" of Western architecture in the seventies has brought to light are just as evident. At the very moment that the European city was being systematically investigated in its architectural entirety, it was undergoing crucial processes of transformation, which radically changed its structure and the problems it presented, as well as shifting these problems from the center to the periphery and, further out still, to ecosystems that could not be reduced to the traditional structures of urban settlement, those of the corporate centers, the shopping malls, the de-industrialized swathes of territory with their heavy loads of pollution and the great traffic infrastructures. At the same time the processes of globalization were introducing new notions of "time" and "space" that were wholly extraneous to traditional urban hierarchies and geographies and perfectly capable of operating with indifference to the particular physical organization of the locations.

The American philosopher Fredric Jameson has recently described these dynamics of globalization as an antagonistic process, a "state of critical friction" between "the process of the particularization of the universal and the universalization of the particular",<sup>7</sup> advancing the hypothesis that globalization and postmodernity are descriptions of two essentially identical processes and thereby giving a basic historical perspective to these events, well beyond the limits of their pure and simple relevance to the present day. We might add that the dissolution of the city as a self-contained architectural structure nullifies the very idea of an autonomous architecture by depriving it of the object of its cognitive design and of the possibility of deducing from it the "types" to which the authenticity of its practice had been entrusted.

Laying claim to the autonomy of architectural knowledge appears to have even more weighty consequences with respect to one of the polarities of the modern history of architecture, the one between architecture and engineering. Since the start of the machine age, the attempt to make sense of technical and scientific progress had formed one of the central questions of modern architectural culture, right up to the sweeping efforts of reform proposed by the German Werkbund at the beginning of the century in the name of artistic creativity's presumed capacity to "give the machine a soul" and thus to ensure that it played a non-disruptive role in the cultural universe of the modern era. It is no accident that the purely "aesthetic" character of this modernistic strategy had been denounced in the Great Britain of the early fifties by Reyner Banham, who had proposed an alternative genealogy founded on the perfect coincidence of technical thinking and architectural thinking: a coincidence that, from Joseph Paxton to Thomas Edison and from Antonio Sant'Elia to

Buckminster Fuller, embraced the story of "another" modernity which was to find shaky confirmation in just those experiments of the fifties.<sup>8</sup>

For "autonomous architecture", in the tradition of classical modernism, technique is identified with technology. It is seen simply as an architectural material, rather than as a way of thinking that needs to be brought within the system of rules proper to the discipline, those of composing and constructing. This, in our view, is the true significance of the practice of "technological transfer" described by Martin Pawley in his attempt to bring Banham's arguments up to date on the threshold of the nineties.<sup>9</sup> Pawley defines this practice as a "process in which techniques and materials that have been developed in a specific area, in one sector of industry or in one culture, are transferred to other spheres of activity", producing specific synergies. The examples he gives are numerous, ranging from transfers of military technology into civilian manufacturing and of technology from the aerospace and automobile industries into the construction sector to transfers of experiments with cast-iron supporting structures and the introduction of mechanical ventilation systems from shipbuilding to civil engineering. But the history of modern construction techniques clearly reveals that the "transfer of technology" has almost without exception gone in only one direction, with architecture on the receiving end, obliged to keep up with the progress of technology and cherishing the dream of one day reestablishing an equilibrium through the specific instruments of the discipline. Moreover, Banham had already expressed doubts about the possibility of treating modern technology and architecture as it has been historically conceived as if they were a single discipline.

Out of this basic ambiguity came the style of architecture which is called "high-tech" precisely because of its frequent resort to the practices of technology transfer. But the designs of Richard Rogers, Renzo Piano or Norman Foster are still entirely consistent with the traditional status of "autonomous architecture," entailing the practices of composition and of reference to architectural types and models: they produce buildings that have the idealized appearance of a machine, emphasizing its characteristics of lightness, precision and transparency but not sharing its design strategies and dynamics of evolution even on a superficial level. The "pace" of technology is still far more rapid than that of architecture and Buckminster Fuller's dream of an "ephemeralization" of the work of architecture, something most closely approached by the Briton Cedric Price with his design for the "Fun Palace" in London, can only be represented in the immutable forms of the new architectural monuments of the machine age. The celebrated examples of Norman Foster's "Reichstag" and Renzo Piano's "Potsdamer Platz" in Berlin pitilessly reveal the totally affirmative

character of their technology and the awkward ambiguity of the use of essentially architectural figures, such as the dome of the "Reichstag", reduced by Foster to a pavilion-belvedere and stripped of its original structural significance as a self-supporting means of covering a space of large dimensions, or the new "Potsdamer Strasse" that connects nothing and goes nowhere, using the morphologies of settlement of the traditional city as a scenic backdrop to a "theme park" of commerce and leisure that has much in common with the spectacular and, in the last analysis more honest, realizations of John Jerde in America.

The theme of the relation between engineering and architecture introduces that of the survival of one of the most complex notions in modern architecture, tectonics. The technique of combining and juxtaposing the discontinuous elements of construction had been understood, ever since the beginning of the nineteenth century when the term had been coined, as a means of recomposing the essential unity of the architectural organism; it could be said: as a means of bringing the various elements that technical innovation placed at the designer's disposal within the regulatory structures of the discipline of architecture. Not coincidentally, as Marco Pogacnik has pointed out with great insight,<sup>10</sup> Gottfried Semper had come to the conclusion that the construction of buildings out of iron should be excluded from the realm of monumental architecture, as "its ideal is invisible architecture", achieved through the ever-increasing minimization of its elements. In fact the prototype of architecture in iron and glass, Joseph Paxton's Crystal Palace, constitutes the pragmatic and distinctive starting point of a "post-tectonic" lineage of modern architecture. It is to Pogacnik again that we owe the identification of a crucial chapter in this genealogy, the moment when, from 1908 onward, Robert Maillart's studies of the floor without beams led to the dissolution of the traditional junction between architrave and column and its replacement by a static continuity between vertical and horizontal elements of the structure. In the other camp and over the same period, Auguste Perret was working on the peculiar parallel between the classical trilitic structure and the new architecture of reinforced concrete and Peter Behrens was trying to create a "grand style" with the gigantic order of the metal framework of his "Turbinen-Fabrik", in which the iron girders assumed the function of columns and the exposed hinges that of capitals. It could be said that, from the Crystal Palace onward, the risk of an "invisible architecture" has become one of the unavoidable questions of modern architecture as well as one of its most irresistible temptations: from Loos's predilection for the continuous spaces of the "Raumplan" located inside the plastered and unadorned shell of the building to the fluid sculptural physiognomies of Erich Mendelsohn's fantastic



works of architecture and the youthful designs of Hans Scharoun and to the enfolding and sinuous geometries of Friedrich Kiesler's "Endless House".

This line of thought stemming from the crisis in the modern notion of tectonics has run in parallel – sometimes overlapping to the point where they have become confused – to the one that sought a response to the widening gulf between science, technology and architecture, between the dynamic forms of scientific thinking and the mechanical sterility of the traditional functionalistic approach, by proposing an epistemological analogy between the new instruments for the analysis of natural phenomena developed by modern biology and a new conception of the city and the work of architecture as organism. In his day Peter Collins had examined the origin of this "biological analogy".<sup>11</sup> For our purposes it suffices to recall the famous Valley Section published by Patrick Geddes in 1915 and the influence that was still exercised by the Scottish biologist and city planner on the young members of Team X forty years later, on the occasion of the "Dorn Manifesto", which contained a diagrammatic representation of the relationship between forms of settlement and forms of association in society. As well as the diagrams devised by the students at the Bauhaus under the direction of Hannes Meyer to illustrate the links between architectural solutions and their users' state of well-being. On the basis of this analogy, the building was "conceived as a complex totality intrinsically conditioned by the environment, in other words as the expression of a code capable of generating an entire city, organically dependent on the surroundings."<sup>12</sup> The crucial fact here is that this original biological approach to architecture produced, from the fifties onward, a radical conceptual innovation that can be summed up in the formula invented by the Hungarian artist László Moholy-Nagy, that of "seeing everything in relationship."<sup>13</sup> The fundamental problem of architectural design become, from this perspective, "a problem of information or of representation"<sup>14</sup> and the diagram an instrument capable of "conveying ideas" rather than just describing the complicated mechanics of natural phenomena. It destroys the abstract geometries of the part of the French academic tradition and replaces them with a dynamic representation of flows, forces and resistances. It transforms the analogical representation of the type into the topological and "generative" one of the relations in time and space that are established within the architectural object.<sup>15</sup>

Above all, the diagrammatic approach to architecture brings into question its autonomous state, by challenging the aesthetic nature of its execution and the conventionality of its compositional practices and treating the territory of the project as a field of forces in which apparently disconnected questions, such as social, behavioral and perceptual problems and economic, structural, temporal and spatial fac-

tors, confront one another. As far back as 1957 the young James Stirling had pointed out that the biological analogy, which he called "dynamic cellularism", would lead to "an architecture comprising several elements, repetitive or varied", that could no longer be reduced "to the static rigidity of a structural grid", but "to patterns of crystal formations or biological divisions."<sup>16</sup> These had then proliferated in the more or less visionary designs of British, Dutch and even French architects in the sixties. But it was Daniel Libeskind in particular who, two decades later, had commenced a systematic criticism of the honorable and at the same time tired virtuosity of the conventional codes of architecture. "The laws of architecture and its dogmas," wrote Libeskind, "are not inscribed on the front of the temple of Solomon, nor in the eternal properties of the cube, nor in some ideal geometry of phenomena,"<sup>17</sup> and his drawings and models experimented with the possibility of representing an architecture released from the slavery of horizontal and vertical projections, from the inert conventions of orthogonality, in other words the possibility of being "more than the shadow of an object", of exploring "the deeper order rooted not only in visible forms, but in the invisible and hidden sources which nourish culture itself, in its thought, art, literature, song and movement."<sup>18</sup>

If we were to add to this complex set of problems the contemporary emergence of a number of phenomena wholly peculiar to the most recent production of architecture – from the slow redistribution of its spheres of influence, in the sense both of a more marked internationalization and of the delineation of a new topography in which the postindustrial outskirts, traffic infrastructures, large suburban shopping centers and leisure facilities are assuming an ever greater importance, to a disenchanted concern for the global themes of communication and consumption and the multimedia universe of the production of images, and finally to the manifestation of a self-indulgent tendency to render the architectural message spectacular, fueled by a system of public recognition and awards – then we would obtain a sufficiently comprehensive image of the hybrid scenario of the architecture of the last decade of this terrible and extraordinary century.

In recent years there have been numerous attempts to interpret the architectural phenomenologies of this scenario, which Michael Hays has described as a process in which "image consumption began to replace object production and the sheer heterogeneity of images exploded any single, stable, typology of the city."<sup>19</sup>

"Light Construction" was the title of the exhibition staged by Terence Riley in 1995 at the Museum of Modern Art in New York,<sup>20</sup> which raised in parallel the two questions of the relation between architecture and transparency – a matter of vision – and of the new "light" technologies of glass – a problem

of construction. The exhibition proposed the "reflexive gaze" described by Jean Starobinski, that intermediate state oscillating between the transparency of reality and the subjectivity of the experience of looking through something, as a metaphor capable of capturing the distinctive attitude of numerous lines of architectural research, from that of David Chipperfield to those of Toyo Ito, Bernard Tschumi and Jean Nouvel. In these works the lightweight and ambiguously immaterial skin of the glass facing, in the infinite varieties permitted by today's technology, resolves the essential polarity described by Gottfried Semper between the envelope and its contents, between the façade turned toward the city and the interior of the house, taking on the function of an interface, of a filter, through which information can flow equally in both directions. This was the result intelligently achieved by Rem Koolhaas in his recent theater on Times Square, in which the auditorium located inside a preexisting building surrounded by an unbroken row of windows sees the fictitious character of what is represented there ambiguously brought into question by the possibility of opening the light veil of drapes that normally encloses the hall, not just rendering the theatrical performance "public" but, at the same time, bringing onto the stage the real action of the city life going on outside. And yet it has to be said that the motif of transparency, of the transfer of the building's contents onto its glazed surface and the consequent loss of any meaning for the notion of façade, was also a fundamental theme of the modernist tradition. In addition, the use of glass as a support for the transmission of information had its origin in the *Reklame-Architektur* of the twenties, going on to pervade the urban landscape with its luminous, ever-changing and brightly colored advertising messages of the fifties.<sup>21</sup> And the thin dividing line that separates today's experiments from the research conducted in the early decades of the century is probably marked more by a particular sensibility, by a taste for sophisticated and translucent filigrees and for the apparent immateriality of new construction techniques than by any radical conceptual shift.

In the same year of 1995 a second exhibition in America, this time in Pittsburgh, called attention to another characteristic of the architecture of the nineties, in apparent contradiction with the foregoing, i. e. the predilection for sculptural configurations that are self-contained and isolated from their surroundings, in other words "monolithic".<sup>22</sup> Paradoxically, more than one of the architects who featured in the New York exhibition were represented in the second as well, including Herzog & de Meuron, Koolhaas and Jean Nouvel: as if the "monolithic" character and the "translucent and lightweight" one had proved to have unexpected affinities. In reality the problem refers to the fundamental one of the relationship between the architectural object and

urban structure and to the attempt to condense into a self-contained figure that response to the place which an analytical-typological approach is, as we have seen, no longer able to make. The growing loss of meaning of urban space, its increasingly indistinct anonymity and the characteristics of dramatic discontinuity – historic city/suburbs, residential city/postindustrial city, city/major traffic structures – typical of those suburban spaces in which the present-day processes of late-capitalist transformation of the city are concentrated have prompted architects to condense the pulsating complexity of functions and activities that was once typical of urban spaces within the closed perimeter of the building. "These buildings", Klaus Theo Brenner has observed, "function like magnets in the complex and chaotic field of urban spaces, giving shape to, keeping alive and stimulating the needs, which still exist, of the citizens of a collective life."<sup>23</sup> They cram the maximum of eloquence into an extreme economy of means and shift the dynamic and complex characteristics of their functional program onto the inside. Their sculptural shapes – the ruthlessly severe geometries of certain works by Peter Zumthor, the dramatically broken volumes of Daniel Libeskind's Jewish Museum in Berlin and the sophisticated and ambiguous envelopes of Herzog & de Meuron's transformer rooms in Basel all come to mind, as well as the plastic manipulations of Frank Gehry – appear in the panorama of the city as signals, as accumulators of meaning.

Paradoxically, it seems to have been precisely the widespread use of computer-based techniques in architectural design that has encouraged consideration of a question whose origin lies in an awareness of the decline of the critical design of autonomous architecture and whose historicity is founded in the conscious attempt to resume the reflection that was interrupted at the beginning of the sixties.

The informational and cybernetic aspects of the diagrammatic approach to design emphasize its abstract and immaterial character. The diagram gives up its original analytical and representative status to become an "abstract machine", according to Deleuze and Guattari's definition,<sup>24</sup> whose "function is not to represent something, still less something real, but to construct a real future, a new type of reality."

It is indisputable that Rem Koolhaas has played a decisive role in this whole story, ever since the time of *Delirious New York*,<sup>25</sup> in which the technique of the cartoon strip and the analogy with cinematographic narrative were substituted for the conventional technique of the orthogonal projection of plans and sections and the diagram was proposed as an instrument in the design process ideally suited to the generation of concepts – "analysis becomes the same thing as creation"<sup>26</sup> – and not just to representing them. This centrality of process dynamics has molded an architectural practice which, as Michael Spe-

aks has pointed out, "is concerned not so much with forms or objects but with shaping the conditions under which forms or objects emerge."<sup>27</sup>

Out of this has come a hybrid conceptual procedure, in which the computer is given the task of organizing an uninterrupted flow of information, analyses, strategic decisions, codes and rules, construction techniques, economic forecasts and representations into a fluid system, structured through continuous integrations in which no particular aspect or disciplinary know-how has the upper hand or is used purely as a means to an end. This "unstable and expansive"<sup>28</sup> state makes it possible to keep putting off essentially architectural decisions, such as the final definition of the relations between idea and form, between content and structure, and the interruption of the process through the choice of a "type". And it emphasizes, on the other hand, the "transformative" potentialities of the project, fed by the accumulation of pieces of information and the relationships established between them, whose identity in the end will be the result of a process of repeated hybridization of its components and the conscious implementation of mediation technologies.

Ben van Berkel and Caroline Bos have stressed the "architectural" significance that these new technologies are capable of assuming, through their modification of three essential parameters of the traditional design process: rapid expansion of the potentialities that arise from the exploration of completely new spatial configurations; subversion of the traditional hierarchies that assigned to the definition of the plan a function preliminary to the subsequent specification of other elements of the design; and finally the involvement of other areas of disciplinary knowledge in the whole process.<sup>29</sup> And they have sought to describe the effects that these works of

architecture with their surprisingly sinuous geometries, the uninterrupted flow of internal spaces along sloping ramps and spiral layouts, the instability of the thresholds between inside and outside, the blurring of boundaries and the ambiguity of architectural figures might have on our capacity to renew our experience of the world: effects that can be "anticipatory, unexpected, climatic, cinematic, time-related, non-linear, surprising, mysterious, compelling and engaging."<sup>30</sup> These effects are precisely those produced by the new technologies of communication and entertainment, advertising and fashion. Yet they are not so irrelevant to the tasks that Moholy-Nagy had assigned to the artist capable of "seeing everything in relationship": "to put layer upon layer, stone upon stone, in the organization of emotions; to record feeling with his particular means, to give structure and refinement as well as direction to the inner life of his contemporaries [...] to penetrate yet un-seen ranges of the biological functions."<sup>31</sup>

The extraordinary "cloud" designed by Elizabeth Diller and Ricardo Scofidio above the waters of Neuchâtel Lake, whose profile made up of tiny nebulized drops of water adapts continually to the variation in wind and atmospheric pressure, holds out to visitors who climb the two spiral ramps up to a platform from where they can contemplate the scenery the promise of an experience made up of wonder and discovery, the body and the senses, bewilderment and rediscovered familiarity, an experience capable of "renewing the perception of things that habit has made go flat."<sup>32</sup>

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#### Notes:

- 1) *Bauen für das 21. Jahrhundert*, in: *Zeit Punkte*, 1999, no. 6.
- 2) Marsilio, Padua 1966.
- 3) Feltrinelli, Milan 1966.
- 4) Museum of Modern Art, New York 1966.
- 5) K. Michael Hays, *Smooth Architecture and the De-differentiation of Practice*, in this issue, cf. too the interesting anthology by the same author, *Architecture. Theory. Since 1968*, MIT Press, Cambridge (Mass.) 1998.
- 6) Kenneth Frampton, *Anti-tabula rasa: verso un Regionalismo critico*, in: *Casabella*, XLVIII (1984), no. 500, pp. 22-25.
- 7) Fredric Jameson, *Globalization and Architecture*, in this issue.
- 8) P. Reyner Banham, *Theory and Design in the First Machine Age*, *The Architectural Press*, London 1960; but also, by the same author, *Edison, der vergessene Pionier*, in the proceedings of the convention *Architekturtheorie*, organized by Oswald Mathias Ungers at the Technische Universität in Berlin in 1967, TU, Berlin 1968, pp. 15-21.
- 9) Martin Pawley, *Theory and Design in the Second Machine Age*, Blackwell, Oxford 1990.
- 10) See the beautiful essay on the subject by Marco Pogacnik, shortly to be published in the magazine *Faces*.
- 11) Peter Collins, *Changing Ideals in Modern Architecture 1750-1950*, Faber & Faber, London 1965.
- 12) Maddalena Scimemi, *Architettura come diagramma*. Il contributo inglese negli anni del secondo dopo-

- guerra, graduate thesis, Istituto Universitario di Architettura, Venice 1998, p. 2. I must thank the author for having given me a brilliant introduction to the mysteries of diagrammatic architecture.
- 13) László Moholy-Nagy, *Vision in Motion*, Hillison and Etten, Chicago 1947, p. 68.
  - 14) M. Scimemi, op cit., pp. 2-3.
  - 15) On this, cf. Peter Eisenman, *Diagram: an Original Scene of Writing*, in: *ANY*, 1998, no. 23, pp. 27-29 (issue devoted to Diagram Work).
  - 16) James Stirling, *Regionalism and Modern Architecture*, in *Architects' Yearbook*, 1957, no. 7, pp. 62-68. Now translated into Italian in: Robert Maxwell (editor), James Stirling. *Scritti di architettura*, Skira, Milan 1998, pp. 51-59.
  - 17) Daniel Libeskind, *Symbol and Interpretation*, in: *Between Zero and Infinity. Selected Projects in Architecture*, Rizzoli, New York 1981, pp. 27-29. On this, cf. my *Scompaginamenti. Note sul frammento, la citazione, la decomposizione*, in: Var. Authors, *La ricostruzione della città*. Berlino-IBA 1987, Electa, Milan 1985, pp. 121-129.
  - 18) D. Libeskind, *Ibidem*, p. 29.
  - 19) K. M. Hays, *Smooth Architecture*, cit. p. 6.
  - 20) Terence Riley, *Light Construction, catalogue of the exhibition*, Museum of Modern Art, New York 1995.
  - 21) Cf. the debate over the exhibition published under the title *Light Construction Symposium*, in: *Columbia Documents of Architecture and Theory (D)*, 1997, no. 6, pp. 5-52.
  - 22) Rodolfo Machado and Rodolphe el-Khoury, *Monolithic Architecture*, Prestel, Monaco/Munich-New York 1995.
  - 23) Klaus Theo Brenner (editor), *Architettura della metropoli*, Idea Books, Milan 1990, p. 23. By the same author, cf. too *Stadttheater/Urban Theatre*, Ernst & Sohn, Berlin 1994; *Heterotope*, Ernst & Sohn, Berlin 1995.
  - 24) Gilles Deleuze and Felix Guattari, *Mille Plateaux*, Les Editions de Minuit, Paris 1980. Italian ed., Rome 1997.
  - 25) Rem Koolhaas, *Delirious New York*, Oxford University Press, New York 1978.
  - 26) *Ibidem*, p. 201.
  - 27) Michael Speaks, *The Singularity of OMA*, in: *ANY*, 1999, no. 24, pp. 44-47.
  - 28) Ben van Berkel and Caroline Bos, *Move*, 3 vols., UN Studio & Goose Press, Amsterdam 1999.
  - 29) *Ibidem*, vol. 2, pp. 160-161.
  - 30) *Ibidem*, vol. 3, p. 141.
  - 31) L. Moholy-Nagy, *Vision in Motion*, cit., p. 11.
  - 32) Hans Robert Jauss, *Apologia dell'esperienza estetica*, Einaudi, Turin 1985. Original ed., Constance 197